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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Keener et al.

Serial No.: 10/618,560

Filed: July 10, 2003

For: SELECTIVE DESTRUCTION OF  
CELLS INFECTED WITH THE HUMAN  
IMMUNODEFICIENCY VIRUS

Confirmation No.: 8242

Examiner: J. Stucker


Group Art Unit: 1648

Attorney Docket No.: LIT-PI-529D1

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Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08 be considered by the Examiner and made of record. Pursuant to M.P.E.P. 609 III A(2), copies of U.S. patents are not being provided. Copies of foreign patent documents and non-patent literature are enclosed pursuant to 37 C.F.R. § 1.98(a)(2).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or an

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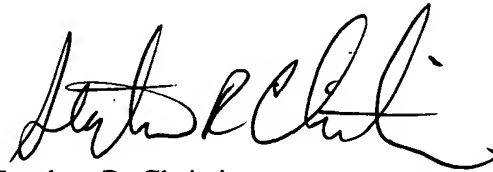
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admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.

Applicants offer to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

This Supplemental Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits. Please charge the sum of \$180.00 to Deposit Account Number 05-0565, and any deficiencies, for the fee associated with the submission of this Supplemental Information Disclosure Statement pursuant to 37 C.F.R. § 1.17(p).

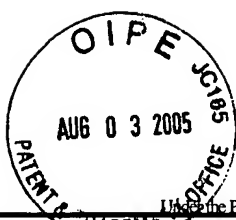
Respectfully submitted,



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Date: 1 Aug 2005

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PTO/SB/08A (10-01)

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1

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1

**Complete if Known**

Application Number	10/618,560
Filing Date	July 10, 2003
First Named Inventor	Keener et al.
Group Art Unit	1648
Examiner Name	J. Stucker
Attorney Docket Number	LIT-PI-529D1

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US-4,293,652	10/06/1981	Cohen	
		US- 4,350,626	09/21/1982	Masuhio et al.	
		US- 4,356,270	10/26/1982	Itakura	
		US- 4,416,988	11/22/1983	Rubin	
		US- 4,450,154	05/22/1984	Masuhio et al.	
		US- 4,458,066	07/03/1984	Canuthers et al.	
		US- 4,554,101	11/19/1985	Hopp	
		US- 4,683,195	07/28/1987	Mullis et al.	
		US- 4,683,202	07/28/1987	Mullis	
		US- 4,792,447	12/20/1988	Uhr et al.	
		US- 4,800,159	01/24/1989	Mullis et al.	
		US- 4,906,469	03/06/1990	Jansen et al.	
		US- 4,962,188	10/09/1990	Frankel	
		US- 4,965,188	10/23/1990	Mullis et al.	
		US- 5,135,736	08/04/1992	Anderson et al.	
		US- 5,165,923	11/24/1992	Thorpe et al.	
		US- 5,169,933	12/08/1992	Anderson et al.	
		US- 5,622,838	04/22/1997	Lord et al.	
		US- 5,981,493	11/09/1999	LaGrone	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 97/01636 A2	01/16/1997	Lentzen et al.		X
		JP 19850102188	11/17/1986	Takashi		X

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Attorney Docket Number	LIT PL 529D1

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		ALAKHOV, V.Y., et al., Increasing Cytostatic Effects of Ricin A Chain and <i>Staphylococcus aureus</i> Enterotoxin A Through <i>In Vitro</i> Hydrophobization with Fatty Acid Residues, 12 Biotechnol. Appl. Biochem. 94-98 (1990)	
		BEAUMELLE, B., et al., Ricin A Chain Can Transport Unfolded Dihydrofolate Reductase into the Cytosol, 272 J. Biol. Chem. 22097-22102 (1997)	
		BROWN, E.L., et al., 68 Meth. Enzymol. 109 (1979) (phosphodiester method)	
		BRYANT, M., et al., Myristoylation-dependent Replication and Assembly of Human Immunodeficiency Virus 1, 87 Proc. Nat'l Acad. Sci. USA 523-527 (1990)	
		BULLER, R.M.L., et al., Poxvirus Pathogenesis, 55 Microbiol. Rev. 80-122 (1991)	
		CHAMBERS, T.J., et al., Evidence that the N-terminal Domain of Nonstructural Protein NS3 from Yellow Fever Virus is a Serine Protease Responsible for Site-specific Cleavages in the Viral Polyprotein, 87 Proc. Nat'l Acad. Sci. USA 8898-8902 (1990)	
		CHOU, K.C., A Vectorized Sequence-coupling Model for Predicting HIV Protease Cleavage Sites in Proteins, 268 J. Biol. Chem. 16938-16948 (1993)	
		CHOU, K.C., Prediction of Human Immunodeficiency Virus Protease Cleavage Sites in Proteins, 233 Anal. Biochem. 1-14 (1996)	
		CLAVERIE, J.M., et al., T-immunogenic Peptides Are Constituted of Rare Sequence Patterns. Use in the Identification of T Epitopes in the Human Immunodeficiency Virus Gag Protein, 18 J. Eur. Immunol. 1547-1553 (1988)	
		CLOSS, O., et al., Stimulation of Human Lymphocytes by Galactose-specific <i>Abrus</i> and <i>Ricinus</i> Lectins, 115 J. Immunol. 1045-1048 (1975)	

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3

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Examiner Name	J. Stucker
Attorney Docket Number	LIT-PL-520D1

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		FINBERG, R.W., et al., Selective elimination of HIV-1-infected Cells with an Interleukin-2 Receptor-specific Cytotoxin, 252 Science 1703-1705 (1991)	
		FRANZ, DAVID R. AND NANCY K. JAAX, MEDICAL ASPECTS OF CHEMICAL AND BIOLOGICAL WARFARE (Chpt. 32, Ricin Toxin) 631-642.	
		FRENOY, J.P., et al., Uptake of Injected <sup>125</sup> I-ricin by Rat Liver <i>In Vivo</i> , 284 Biochem. J. 249-257 (1992)	
		GATLIN, J., et al., Regulation of Intracellular Human Immunodeficiency Virus Type-1 Protease Activity, 244 Virology 87-96 (1998)	
		GenBank accession numbers X76644, X76720, X76721, X76722, X54873, X54872, X55667, A58957	
		GHIARA, J.B., et al., Crystal Structure of the Principal Neutralization Site of HIV-1, 264 Science 82-85 (1994)	
		HALLING, K.C., et al., Genomic Cloning and Characterization of a Ricin Gene from Ricinus communis, 13 Nucleic Acids Res. 8019-8033 (1985)	
		HOUGHTEN, 82 Proc. Nat'l Acad. Sci. USA 5131-35 (1985) (solid phase peptide synthesis)	
		HUNG, C.H., et al., Cloning and Expression of Three Abrin A-chains and Their Mutants Derived by Site-specific Mutagenesis in Escherichia coli, 219 Eur. J. Biochem. 83-87 (1994)	
		HUNG, C.H., et al., Primary Structure of Three Distinct Isoabrinins Determined by cDNA Sequencing: Conservation and Significance, 229 J. Mol. Biol. 263-267 (1993)	
		HUNKAPILLER et al., 310 Nature 105-111 (1984)	

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4

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		KABANOV, A.V., et al., Fatty Acylation of Proteins for Translocation Across Cell Membrane, 1 Biomed. Sci. 33-36 (1990)	
		KATZ, R.A., et al., The Retroviral Enzymes, 63 Annu. Rev. Biochem. 133-173 (1994)	
		KELLERMAN & FERENCI, 90 Methods in Enzymology 459-463 (1982)	
		KITAOKA, Y., Involvement of the Amino Acids Outside the Active-site Cleft in the Catalysis of Ricin A Chain, 257 Eur. J. Biochem. 255-262 (1998)	
		KORANT, B.D., Viral Proteases: An Emerging Therapeutic Target, 8 Crit. Rev. Biotechnol. 149-157 (1988)	
		KORNFELD, H., et al., Lymphocyte Activation by HIV-1 Envelope Glycoprotein, 335 Nature 6189 (1988)	
		KWONG, P.D., et al., Structure of an HIV gp120 Envelope Glycoprotein in Complex with the CD4 Receptor and a Neutralizing Human Antibody, 393 Nature 648-659 (1998)	
		KYTE, J., et al., A Simple Method for Displaying the Hydropathic Character of a Protein, 157 J. Mol. Biol. 105-132 (1982)	
		LAMB, F.I., et al., Nucleotide Sequence of Cloned cDNA Coding for Preprorin, 148 Eur. J. Biochem. 265-270 (1985)	
		LAMBERT, J.M., et al., An Immunotoxin Prepared with Blocked Ricin: a Natural Plant Toxin Adapted for Therapeutic Use, 51 Cancer Res. 6236-6242 (1991)	

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5

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		LORD, J.M., et al., Ricin: Structure, Mode of Action, and Some Current Applications, 8 FASEB J. 201-208 (1994)	
		MATHE, G., The Kinetics of Cancer Cells and of HIV1: The Problems of Cell and Virus Rebounds and of Latency, 52 Biomed. Pharmacother. 413-420 (1998)	
		MIYOSHI, H., et al., Development of a Self-inactivating Lentivirus Vector, 72 J. Virol. 8150-8157 (1998)	
		NARANG, S.A., et al., 68 Meth. Enzymol. 90 (1979) (phosphotriester method)	
		PALLANCA, A., et al., Uncompetitive Inhibition by Adenine of the RNA-N-glycosidase Activity of Ribosome-inactivating Proteins, 1384 Biochim. Biophys. Acta 277-284 (1998)	
		PASTAN, I., et al., Recombinant Toxins for Cancer Treatment, 254 Science 1173-1177 (1991)	
		PATICK, A.K., et al., Protease Inhibitors as Antiviral Agents, 11 Clin. Microbiol. Rev. 614-627 (1998)	
		PERT, C.B., et al., Octapeptides Deduced from the Neuropeptide Receptor-like Pattern of Antigen T4 in Brain Potently Inhibit Human Immunodeficiency Virus Receptor Binding and T-cell Infectivity, 83 Proc. Nat'l Acad. Sci. USA 9254-9258 (1986)	
		PINCUS, S.H., et al., Anti-Human Immunodeficiency Virus Immunoconjugates, 32 Adv. Pharmacol. 205-247 (1995)	
		PINCUS, S.H., Therapeutic Potential of Anti-HIV Immunotoxins, 33 Antiviral Res. 1-9 (1996)	
		PUGACHEV, K.V., et al., Site-directed Mutagenesis of the Tick-borne Encephalitis Virus NS3 Gene Reveals the Putative Serine Protease Domain of the NS3 Protein, 328 FEBS Lett. 115-118 (1993)	
		RICHARDSON, P.T., et al., The Expression of Functional Ricin B-chain in <i>Saccharomyces cerevisiae</i> , 950 Biochim. Biophys. Acta 385-394 (1988)	

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6

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		ROBERTS, L. M., et al., Molecular Cloning of Ricin, 7 Targeted Diagn Ther 81-97 (1992)	
		ROBERTUS, J.D., et al., Structural Analysis of Ricin and Implications for Inhibitor Design, 34 Toxicon 1325-1334 (1996)	
		RUTENBER, E., et al., Structure of Ricin B-chain at 2.5 A Resolution, 10 Proteins 260-269 (1991)	
		SELA, B.A., et al., Lymphocyte Activation by Monovalent Fragments of Antibodies Reactive with Cell Surface Carbohydrates, 143 J. Exp. Med. 665-671 (1976)	
		SIMMONS, B.M., et al., Mannose Receptor-mediated Uptake of Ricin Toxin and Ricin A Chain by Macrophages, 261 J. Biol. Chem. 7912-7920 (1986)	
		SINHA, N.D., et al., 12 Nucl. Acids Res. 4539 (1984)	
		SINHA, N.D., et al., 15 Nucl. Acids Res. 397 (1987)	
		SINHA, N.D., et al., 16 Nucl. Acids Res. 319 (1988)	
		SINHA, N.D., et al., 24 Tetrahedron Lett. 5843 (1983)	
		Tözsér, J. et al., Studies on the Symmetry and Sequence Context Dependence of the HIV-1 Proteinase Specificity, 272 J. Biol. Chem. 16807-16814 (1997)	
		TREGGAR, J.W., et al., The Lectin Gene Family of Ricinus communis: Cloning of a Functional Ricin Gene and Three Lectin Pseudogenes, 18 Plant Mol. Biol. 515-525 (1992)	

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		VAN OIJEN, M.G.C.T., et al., Rationale for Use of Immunotoxins in the Treatment of HIV-infected Humans, 5 J. Drug Target 75-91 (1997)	
		VON DER HELM, K., Retroviral Proteases: Structure, Function and Inhibition from a Non-anticipated Viral Enzyme to the Target of a Most Promising HIV Therapy, 377 Biol. Chem. 765-774 (1996)	
		WANG, C.T., et al., Sequence Requirements for Incorporation of Human Immunodeficiency Virus Gag- <sup>2</sup> -galactosidase Fusion Proteins into Virus-like Particles, 59 J. Med. Virol. 180-188 (1999)	
		WESTBY, M., et al., Preparation and Characterization of Recombinant Proricin Containing an Alternative Protease-sensitive Linker Sequence, 3 Bioconjug. Chem. 375-381 (1992)	
		WOOD, K.A., et al., Preproabrin: Genomic Cloning, Characterisation and the Expression of the A-chain in Escherichia coli, 198 Eur. J. Biochem. 723-732 (1991)	
		WU, J.C., et al., Synthetic HIV-2 Protease Cleaves the GAG Precursor of HIV-1 with the Same Specificity as HIV-1 Protease, 277 Arch. Biochem. Biophys. 306-311 (1990)	
		WYATT, R., et al., The Antigenic Structure of the HIV gp120 Envelope Glycoprotein, 393 Nature 705-711 (1998)	
		WYATT, R., et al., The HIV-1 Envelope Glycoproteins: Fusogens, Antigens, and Immunogens, 280 Science 1884-1888 (1998)	
		ZHANG, A., et al., A Disulfide-bound HIV-1 V3 Loop Sequence on the Surface of Human Rhinovirus 14 Induces Neutralizing Responses Against HIV-1, 380 Biol. Chem. 365-374 (1999)	
		ZUFFEREY, R., et al., Self-inactivating Lentivirus Vector for Safe and Efficient In Vivo Gene Delivery, 72 J. Virol. 9873-9880 (1998)	

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PTO/SB/21 (09-04)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

10

Application Number

10/618,560

Filing Date

July 10, 2003

First Named Inventor

Keener et al

Art Unit

1648

Examiner Name

J. Stucker

Attorney Docket Number

LIT-PI-529D1

**ENCLOSURES (Check all that apply)**

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/  
Incomplete ApplicationReply to Missing Parts  
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a  
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) \_\_\_\_\_

☐ Landscape Table on CD

Remarks



After Allowance Communication to TC

Appeal Communication to Board  
of Appeals and InterferencesAppeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify  
below):

Return Receipt Post Card

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

Battelle Energy Alliance, LLC

Signature

Printed name

Stephen R. Christian

Date

1 AUG 2005

Reg. No.

32,687

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Janine Hall

Date

8/1/05

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TRADEMARK Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180.00

**Complete if Known**

Application Number	10/618,560
Filing Date	July 10, 2003
First Named Inventor	Keener et al
Examiner Name	J. Stucker
Art Unit	1648
Attorney Docket No.	LIT-PI-529D1

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 05-0565 Deposit Account Name: Bechtel BWXT Idaho, LLC

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180
<b>Total Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>
- 20 or HP = _____	x 25 = _____	
HP = highest number of total claims paid for, if greater than 20.		
<b>Indep. Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>
- 3 or HP = _____	x 100 = _____	
HP = highest number of independent claims paid for, if greater than 3.		

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 = 0	/ 50 = 0	(round up to a whole number) x 0	= 0	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Supplemental Information Disclosure Statement

Fees Paid (\$)

180.00

**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent) 32,687	Telephone 208/526-9140
Name (Print/Type)	Stephen R. Christian	Date	1 Aug 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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